

REMARKS

Pursuant to the Office Action mailed October 29, 2008, claims 1, 2, and 64-66 stand rejected under 35 U.S.C. 102 (b) as being anticipated by U.S. Patent No. 5,776,170 (MacDonald). Claims 45-63 stand rejected under 35 U.S.C. 103(a) as being obvious over MacDonald. Claims 67-70 stand rejected under 35 U.S.C. 103(a) as being obvious over MacDonald in view of U.S. Patent No. 6,032,073 (Effenhauser).

Claim 1 has been amended to recite an apparatus for applying electrical pulses to a patient's body by at least two electrodes at respective locations on the patient's body, the apparatus comprising a pulse generating unit connectable to the electrodes, the pulse generating unit being arranged to provide a series of electrical pulses, wherein said series of pulses comprises a plurality of first and second polarity impulses having a temporal spacing between the first and second impulses, wherein each impulse has a width of between 15 to 20 μ S, said pulses have a peak amplitude lying within the range 50 to 450 volts, plus or minus respectively, and the voltage decays from the respective positive or negative peak voltage to zero volts. The references of record do not teach, suggest, or disclose that the impulse has a width of between 15 to 20 μ S, said pulses having a peak amplitude lying within the range 50 to 450 volts, plus or minus respectively, and the voltage decaying from the respective positive or negative peak voltage to zero volts.

The application is rejected primarily over the MacDonald reference. MacDonald is discussed in the preamble of the present application and discloses an apparatus for producing analgesia through electrical stimulation by generating a signal having a rapid rise and falling phases (Abstract) which is exemplified by a square wave signal which can be monopolar and bipolar (column 3, lines 60-67). The signal voltage can be 450 volts or less (column 3, line 59) or up to 1kV (claim 3). The pulse width of the signal is 10 microseconds or less (claim 1). The present invention, as defined by amended claim 1, is distinguished from MacDonald in that the pulse width is 15-20 microseconds, in that it has a pulse width of 15-20 microseconds in combination with a voltage of 50-450

volts and the presence of a decaying change of voltage from maximum absolute amplitude to zero.

The Office Action indicates that changing the pulse width to 15-20 microseconds is an obvious modification. However, the teaching of MacDonald, as illustrated by the absolute limitation provided in claim 1, is limited to less than 10 microseconds. Applicant has found that a pulse width of greater than 10 microseconds is efficacious. Furthermore, in MacDonald it is clear that the combination of voltage and pulse width is material to the sensation of the user. The teaching of MacDonald is that a pulse width of 1-10 microseconds is permissible for a satisfactory patient treatment at significant voltages. Applicant submits that the decaying fall of the wave surprisingly enables the electrical pulse to be applied to a patient's body to provide analgesia without undue heating and avoiding unwanted tingling or pain. A declaration under 37 C.F.R. 1.132 is being provided by the inventor to verify these arguments.

This application has been carefully reviewed in light of the Office Action mailed October 29, 2008, and it is believed that the application is now in condition for immediate allowance, which action at an early date is respectfully requested, for at least the reasons stated herein. A petition for a one month extension of time is being submitted herewith. The Director is hereby authorized to charge any additional fees or any underpayments which may be required for the above-referenced application to Deposit Account No. 01-0265.

Respectfully submitted,

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